



Gulf of Mexico Harmful Algal Bloom Bulletin

Region: Texas

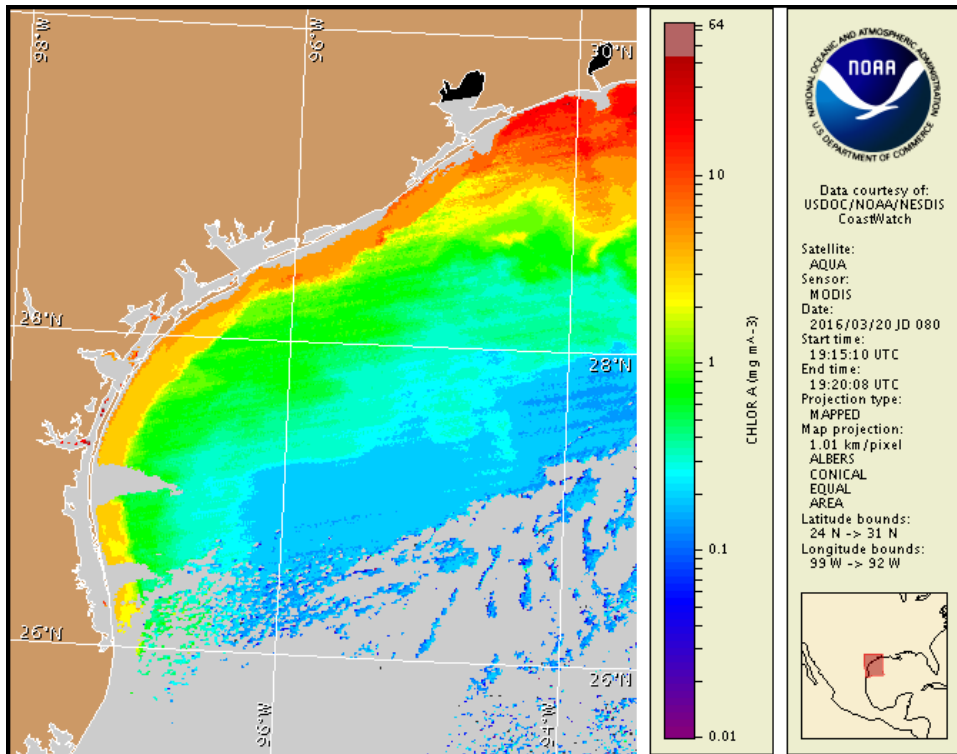
Monday, 21 March 2016

NOAA National Ocean Service

NOAA Satellite and Information Service

NOAA National Weather Service

Last bulletin: Monday, March 14, 2016



Satellite chlorophyll image with possible *K. brevis* HAB areas shown by red polygon(s), when applicable. Points represent cell concentration sampling data from March 11 to 18: red (high), orange (medium), yellow (low b), brown (low a), blue (very low b), purple (very low a), pink (present), and green (not present). Cell count data are provided by Texas Parks and Wildlife Department. For a list of sample providers and a key to the cell concentration categories, please see the HAB-OFS bulletin guide:

http://tidesandcurrents.noaa.gov/hab/hab_publication/habfs_bulletin_guide.pdf

Detailed sample information can be obtained through the Texas Parks and Wildlife Department at:

<http://www.tpwd.state.tx.us/landwater/water/enviroconcerns/hab/redtide/status.phtml>

To see previous bulletins and forecasts for other Harmful Algal Bloom Bulletin regions, visit the NOAA Harmful Algal Bloom Operational Forecast System bulletin archive:

<http://tidesandcurrents.noaa.gov/hab/bulletins.html>

Conditions Report

Karenia brevis (commonly known as Texas red tide) ranges from not present to background concentrations along the coast of Texas. No respiratory irritation is expected Monday, March 21 through Monday, March 28.

Check http://tidesandcurrents.noaa.gov/hab/beach_conditions.html for recent, local observations.

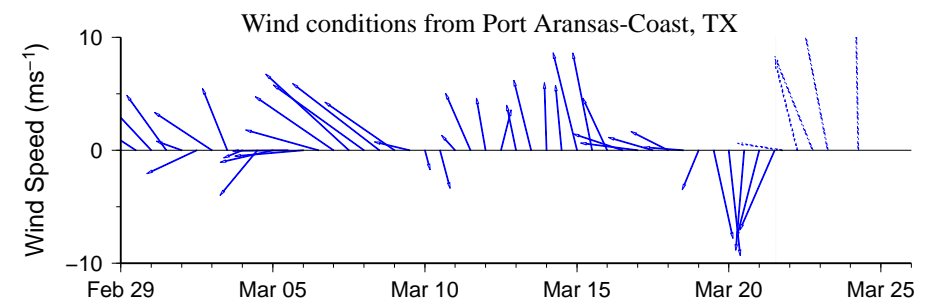
Analysis

Data from Texas A&M University's Imaging FlowCytobot, located on the Port Aransas ship channel, is currently unavailable. However, previous sampling indicated *Karenia brevis* concentrations ranging from 'not present' to 'background' (TAMU; 3/7-14).

Recent MODIS Aqua imagery (3/20, shown left) is obscured by clouds in patches along- and offshore the Texas coast, limiting analysis. Elevated to very high chlorophyll (2 to $>20\mu\text{g/L}$) is visible along- and offshore the coast of Texas from Sabine Pass to the Matagorda Peninsula. Elevated chlorophyll (2 to $7\mu\text{g/L}$) is visible along- and offshore from the Matagorda Peninsula to the Rio Grande. Elevated chlorophyll is not indicative of the presence of *K. brevis* and is most likely due to the resuspension of benthic chlorophyll and sediments along the coast.

Forecast models based on predicted near-surface currents indicate a potential maximum transport of 40 km south from the Port Aransas region from March 20-24.

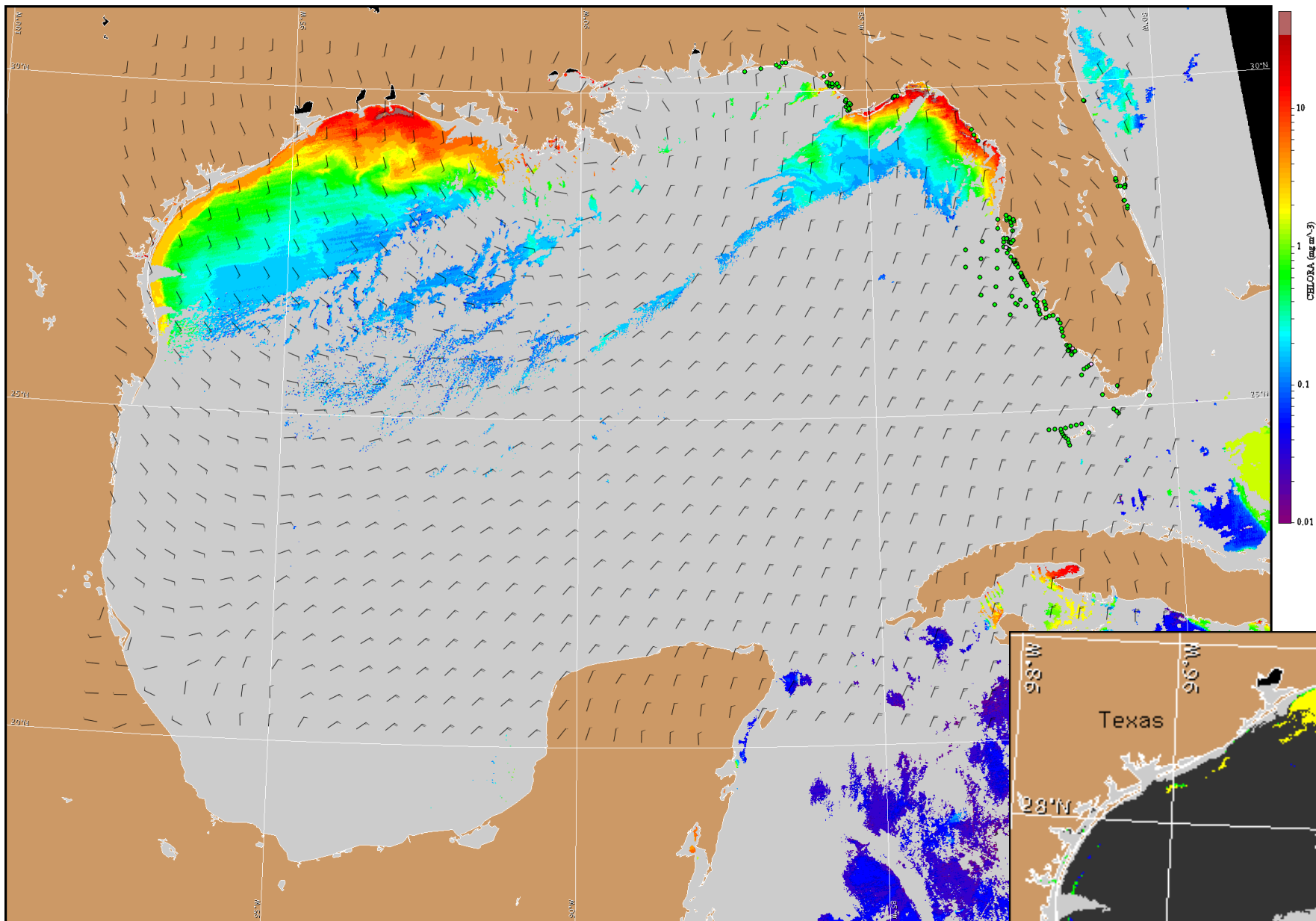
Davis, Kavanaugh



Wind speed and direction are averaged over 12 hours from buoy measurements. Length of line indicates speed; angle indicates direction. Red indicates that the wind direction favors upwelling near the coast. Values to the left of the dotted vertical line are measured values; values to the right are forecasts. Wind observation and forecast data provided by NOAA's National Weather Service (NWS).

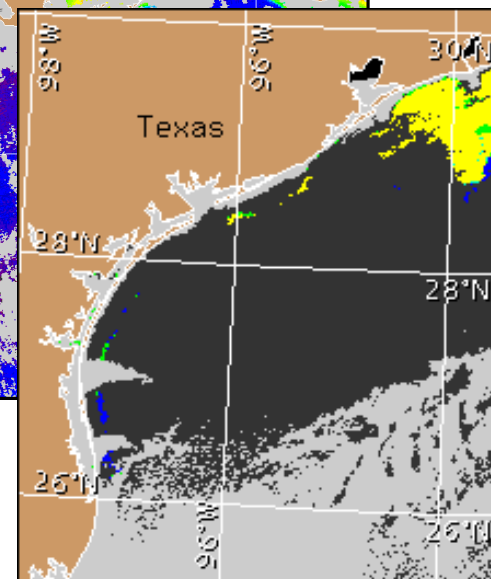
Wind Analysis

Port Aransas to Matagorda Ship Channel: East to southeast winds (5-15kn, 3-8m/s) today becoming south winds (15-25kn, 8-13m/s) Tuesday through Wednesday. North to northwest winds (15-25kn) Thursday becoming northeast winds (15-20kn, 8-10m/s) Thursday night. East to southeast winds (10-15kn, 5-8m/s) Friday.



Satellite chlorophyll image and forecast winds for March 22, 2016 06Z with points representing cell concentration sampling data from March 11 to 18: red (high), orange (medium), yellow (low b), brown (low a), blue (very low b), purple (very low a), pink (present), and green (not present). Cell count data are provided by Texas Parks and Wildlife Department. For a list of sample providers and a key to the cell concentration categories, please see the HAB-OFS bulletin guide:

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Verified and suspected HAB areas shown in red. Other areas with *K. brevis* optical characteristics shown in yellow (see p. 1 analysis for interpretation).